IN THE CLAIMS

Claims 1-7 (Canceled)

8. (New) A method comprising

performing density gradient centrifugation on bone marrow; and isolating human mesenchymal stem cells from a fraction having a density of 1.050 - 1.070 g/ml.

- (New) The method according to claim 1, wherein said performing uses an isotonic solution of Ficoll® or Percoll®.
- (New) The method according to claim 2, wherein said isotonic solution is Percoli® and said density is 1.068 g/ml.
- 11. (New) A mesenchymal stem cell obtained according to a method of claim 8,
- 12. (New) A mesenchymal stem cell obtained according to a method of claim 9.
- 13. (New) A mesenchymal stem cell obtained according to a method of claim 10.
- 14. (New) A pharmaceutical preparation comprising a mesenchymal stem cell according to claim 11
- 15. (New) A pharmaceutical preparation comprising a mesenchymal stem cell according to claim 12.
- 16. (New) A pharmaceutical preparation comprising a mesenchymal stem cell according to claim 13.
- 17. (New) A method of manufacturing a pharmaceutical preparation comprising formulating isolated mesenchymal stem cells according to claim 1 and a pharmaceutically acceptable excipient and/or a carrier:
- 18. (New) A method of manufacturing a pharmaceutical preparation comprising formulating isolated mesenchymal stem cells according to claim 2 and a pharmaceutically acceptable excipient and/or a carrier.
- 19. (New) A method of manufacturing a pharmaceutical preparation comprising formulating isolated mesenchymal stem cells according to claim 3 and a pharmaceutically acceptable excipient and/or a carrier.

20. (New) A method of isolating mesenchymal stem cells from bone marrow comprising performing density gradient centrifugation using a solution of Ficoll® or Percoll® with a density of 1.068 g/ml.